

REMARKS/ARGUMENTS

The Applicant has added four new claims 14 through 17, and has amended claims 1 through 6 and 8 through 13. These amendments have not been made for statutory purposes, but rather to correct errors in English grammar and usage, and to more explicitly set forth certain limitations that had been present in the claims prior to their amendment. Furthermore, the scope of the claims has not been narrowed by these amendments, but has, in fact, been broadened in certain respects. Exhibit A, captioned “Version with markings to show changes made,” attached hereto, shows the changes that were made to the claims.

For the reasons set forth below, the Applicants request reconsideration of the Examiner’s rejection of claims 1 through 3, 5, 6, 8, 9, 11, and 12.

I. Rejections Under 35 U.S.C. § 102

The Examiner rejected claims 1, 5, 6, 8, 11 and 12 under 35 U.S.C. 102(e), asserting that these claims are anticipated by U.S. Patent No. 5,390,340 (“Kondo”). The Applicants, however, respectfully disagree.

A. Independent Claims 1 and 8

Among the limitations recited by independent claim 1 is the requirement of an “operation clock control means for controlling, based on a received electric field *strength* detected by said detecting means, a *frequency* of an operation clock used for processing data transmitted and received by said wireless transmitting/receiving means” (emphasis added). Similarly, among its limitations, independent claim 8 requires “controlling a *frequency* of said operation clock based on said detected *strength* of said receiving electric field” (emphasis added). Kondo, however, fails to either disclose or suggest these limitations.

Kondo does not teach controlling the frequency of an operation clock based on the strength of the received electric field. Rather, in Kondo, the intensity of an electric field is

used to control what signals are used to control synchronization of a pager's internal clock. More specifically, in Kondo an electric field detector 32 is used to measure whether the intensity of the received electric field has exceeded a threshold level. See Kondo, Figure 2; col. 5, lines 16-21. If it has, the clock's synchronization control signal CC is a function of difference signal D1, which is the frequency or phase difference between a digital signal sequence AA and the internal clock pulse sequence CK. Id. at Figure 2; col. 5, lines 53-65; col. 5, lines 4-7. If it has not, the clock's synchronization control signal CC is a function of an operation control signal SY, which is produced during the presence of a preamble signal and a word synchronization signal. Id. at col. 5, lines 29-52.

Since Kondo neither teaches nor suggests using the strength of an electric field to control the frequency of an operation clock, the rejection of independent claims 1 and 8 under 35 U.S.C. 102 should be withdrawn.

B. Dependent Claims 5, 6, 11 and 12

Claims 5 and 6 depend from, and include all the limitations of, independent claim 1. Similarly, claims 11 and 12 depend from, and include all the limitations of, independent claim 8. Thus, for the same reasons stated previously in connection with independent claims 1 and 8, Kondo fails to read on their respective dependent claims and, as a result, the rejection of claims 5, 6, 11 and 12 under 35 U.S.C. 102 should also be withdrawn.

II. Rejections Under 35 U.S.C. 103

The Examiner rejected claims 2, 3 and 9 under 35 U.S.C 103(a) as being obvious over Kondo in light of what is known to an ordinary person skilled in the art. The Applicants respectfully disagree with the Examiner's assertion, and request that the rejection be withdrawn.

To establish a *prima facie* case of obviousness, two basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. The teaching or suggestion to

make the claimed combination must be found in the prior art – not based on the applicant’s disclosure. See M.P.E.P. §706.02(j), citing *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

A. Claims 2 and 9

With respect to claims 2 and 9, the Examiner merely asserts, without support, that “it is known to an ordinary person skilled in the art that the larger the frequency the greater the interference and . . . [that the] interference will interfere with weaker electric fields.” Office Action at 3. The Examiner then reasons that it would therefore have been obvious to an ordinary person skilled in the art at the time of the invention to modify Kondo to teach decreasing the frequency of the clock when the electric field is weaker in order to receive signals.

The Examiner, however, fails to point out any teaching or suggestion in Kondo, or in the prior art as a whole, that would motivate one of ordinary skill in the art to modify Kondo to reduce the frequency of an operation clock as a strength of a received electric field decreases, as required by claims 2 and 9. Moreover, even such a motivation were apparent – and it is not – the Examiner has not established that either Kondo, or the prior art generally, teaches or suggests reducing the frequency of an operation clock as a strength of a received electric field decreases. As a result, the Examiner’s rejection of claims 2 and 9 under 35 U.S.C. 103 should be withdrawn.

B. Claim 3

The same reasoning applies to the Examiner’s rejection of claim 3. Again, the Examiner fails to cite a motivation for one of ordinary skill in the art to modify Kondo to control the frequency of an operation clock based on the strength of the received electric field, as required by claim 3. Moreover, the Examiner fails to establish that either Kondo, or the prior art generally, teaches or suggests this limitation. As result, the Examiner’s rejection of claim 3 under 35 U.S.C. 103 should also be withdrawn.

III. Claims 4, 7, 10 and 13

The Examiner has allowed claim 7, and the Applicant would like to thank the Examiner for doing so. Although the Examiner has objected to claims 4, 10 and 13 as being dependent on a rejected base claim, he has suggested that these claims would be

allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. Again, we thank the Examiner for his suggestion, but respectfully defer acting on it until after the Examiner has rendered a decision on our request for reconsideration of the rejections of base claims 1 and 8, as set forth above.

IV. Conclusion

In view of the arguments set forth above, we respectfully submit that each of the pending claims in the present application is in immediate condition for allowance. Accordingly, we request that the Examiner withdraw the outstanding rejection of the pending claims and pass this application to issue.

Dated: July 11, 2002

Respectfully submitted,

By 

Steven I. Weisburd

Registration No.: 27,409

DICKSTEIN SHAPIRO MORIN &

OSHINSKY LLP

1177 Avenue of the Americas

41st Floor

New York, New York 10036-2714

(212) 835-1400

Attorneys for Applicant

Version With Markings to Show Changes Made

1. (Amended) A wireless communication terminal comprising:
wireless transmitting/receiving means [which transmits] for transmitting and
[receives] receiving data;
detecting means for detecting a strength of a receiving electric field [strength at] by
said wireless transmitting/receiving means; and
operation clock control means [controlling] for controlling, based on said receiving
electric field strength detected by said detecting means, a frequency of an operation clock
used for processing data transmitted and received by said wireless transmitting/receiving
means [based on a receiving electric field strength detected by said detecting means].
2. (Amended) The wireless communication terminal according to [said] claim 1,
[wherein] said operation clock control means [has] including means [controlling] for
reducing said [a] frequency of [an] said operation clock [to be smaller as] as said strength
of [a] said receiving electric field [strength becomes smaller] decreases.
3. (Amended) The wireless communication terminal according to [said] claim 1,
wherein:
said detecting means [has] includes memory means [memorizing] for storing a
measured value of [a detected] said strength of said receiving electric field [strength,]; and
said operation clock control means [has] includes means for controlling [a] said
frequency of said operation clock based on [a receiving electric field strength memorized]
said measured value stored by said memory means.
4. (Amended) The wireless communication terminal according to [said] claim 1,
wherein [a predetermined number of receiving level inferential values is stored in advance
and];
said detecting means [has] includes means for selecting [said] and maintaining a
receiving level inferential value from [said] a plurality of previously stored receiving level
inferential values [corresponding], wherein said selected receiving level inferential value

corresponds to [a] said detected receiving electric field [strength and maintaining said receiving level inferential value,]; and

said operation clock control means [has a predetermined number] includes:

a plurality of operation clock generation means [generating] that generate operation clocks corresponding to said receiving level inferential values; and

selecting means for selecting one of said plurality of operation clock generation means corresponding to [a] said receiving level inferential value that is maintained [at] by said detecting means.

5. (Amended) The wireless communication terminal according to [said] claim 1, wherein:

said wireless transmitting/receiving means [is means performing] performs transmitting/receiving processing in accordance with a Time Division [Multiplexing] Multiple Access (TDMA) communication method[,]; and

said operation clock control means [is means controlling a] controls said frequency of [an] said operation clock [by its being synchronized] in synchronization with a timing of a time division receiving operation of said wireless transmitting/receiving section.

6. (Amended) The wireless communication terminal according to said claim 5[, wherein]:

said wireless transmitting/receiving means [has] including means for generating an interrupt signal at a starting time of a receiving slot [that is a timing of]of said time division receiving operation and an interrupt end signal at an ending time of said receiving slot[,]; and

said operation clock control means [has] including means for controlling [an] said operation clock [to be a] frequency according to said receiving electric field strength in response to said interrupt signal, and means for ending [off controlling a frequency] said control of said operation clock frequency in response to said interrupt end signal.

8. (Amended) In a wireless communication terminal, a method of controlling an operation clock for processing [transmitting/receiving] transmitted/received data, said method comprising the steps of:

detecting a strength of a receiving electric field [strength]; and
controlling a frequency of [an] said operation clock [for processing transmitting/receiving data] based on said detected strength of said receiving electric field [strength].

9. (Amended) The method [of controlling an operation clock for processing transmitting/receiving data] according to [said] claim 8, wherein said [control] controlling step [is a step of] includes a step of controlling [a] said frequency of [an] said operation clock [to be smaller] by reducing said frequency of said operation clock as [a] said detected strength of said receiving electric field [strength becomes smaller] decreases.

10. (Amended) The method [of controlling an operation clock for processing transmitting/receiving data] according to [said] claim 8, wherein:

said detecting step[, in which a] includes a step of selecting, out of said plurality of receiving level inferential values [are set in advance], [is a step of selecting] a receiving level inferential value corresponding to [a] said detected strength of said receiving electric field [strength]; and

said control step includes a step of selecting, out of said plurality of operation clocks, [receiving level inferential values, and said control step, in which a plurality of operation clocks corresponding to a plurality of receiving level inferential values are prepared in advance, is a step of selecting] an operation clock corresponding to said selected receiving level inferential value [out of said plurality of operation clocks].

11. (Amended) The method [of controlling an operation clock for processing transmitting/receiving data] according to [said] claim 8, wherein:

said processing of said transmitted/received [transmitting/receiving] data is performed in accordance with a Time Division [Multiplexing] Multitple Access (TDMA) communication method[,]; and

said [control] controlling step [is] includes a step of controlling [a] said frequency of said operation clock [by its being synchronized] in synchronization with a timing of a time division receiving operation.

12. (Amended) The method [of controlling an operation clock for processing transmitting/receiving data] according to [said] claim 11, wherein said [control] controlling step [is] includes a step of starting [controlling] to control said frequency of said [an] operation clock at a starting time of a receiving slot and ending [off controlling a frequency] said control of said frequency of said operation clock at an ending time of said receiving slot.

13. (Amended) The method [of controlling an operation clock for processing transmitting/receiving data] according to [said] claim 12, wherein said [control] controlling step [is] includes a step of returning [a] said frequency of [an] said operation clock to [a certain] an original frequency of said operation clock at [an] said ending time of said receiving slot.

14. (New) A wireless communication terminal comprising:
a wireless transceiver that transmits and receives data;
an electric field detector that detects a strength of an electric field received by the wireless transceiver;
an operation clock; and
a control circuit that changes the frequency of the operation clock based on the detected strength of the received electric field.

15. (New) A wireless communication terminal according to claim 14, further comprising a central processing unit (CPU), wherein an operating speed of the CPU changes according to the frequency of the operation clock.

16. (New) A method for controlling a frequency of an operation clock in a wireless communication terminal, the method comprising:

detecting a strength of an electric field received by the wireless communication terminal; and

changing the frequency of the operation clock based on the detected strength of the received electric field.

17. (New) The method according to claim 16, further comprising changing an operating speed of a central processing unit in accordance with the frequency of the operation clock.